## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 6 May 2005 (06.05.2005)

PCT

## (10) International Publication Number WO 2005/040783 A1

- (51) International Patent Classification?: G01N 27/327, 33/544
- (21) International Application Number:

PCT/AU2004/001453

- (22) International Filing Date: 22 October 2004 (22.10.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2003905808

22 October 2003 (22.10.2003) AU

- (71) Applicant (for all designated States except US): AMBRI LIMITED [AU/AU]; 126 Greville Street, CHATSWOOD, NSW 2067 (AU).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): CORNELL, Bruce, Andrew [AU/AU]; 58 WYCOMBE ROAD, NEUTRAL BAY, New South Wales 2089 (AU).
- (74) Agent: BLAKE DAWSON WALDRON PATENT SER-VICES; LEVEL 39, 101 Collins Street, Melbourne, VIC 3000 (AU).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NOVEL SENSOR CONFIGURATION

(57) Abstract: A device comprising a well defined within a substrate, said substrate comprising, in sequence, a first base layer, a second hydrophobic layer, and a third hydrophilic layer; said well extending from the upper surface of the base layer through the second and third layers to provide an opening in the upper surface of the third layer wherein a lipid membrane comprising a closely packed array of self-assembling amphiphilic molecules extends across the well within the region defined between the first base layer and the third hydrophilic layer. A method of forming the device is also provided.